THURSDAY, DECEMBER 5, 1889.

THE MANCHESTER CONFERENCE.

THE Manchester Conference on the working of the Technical Instruction Act was as important a representative gathering as has taken place for some years to consider an educational question. The Conference was called by the Technical Association, and the Executive Committee and the branch Associations throughout the country were strongly represented. Invitations were also addressed to the chief local authorities and School Boards in large centres, and the principal technical schools and institutions. It says much for the change which has come over public opinion in the last two years on educational matters, that a circular, unadorned by promises of party speeches by prominent M.P.'s, but merely inviting discussion on the details of the operation of an Education Act, should have sufficed to cram the Mayor's parlour with a body of nearly 300 delegates, representing more than sixty local authorities and institutions.

"Conferences," Mr. Acland said at the outset, "are usually disappointing," and it would be absurd to expect that so large and miscellaneous a gathering would dispose satisfactorily, within little more than a couple of hours, of the four difficult questions raised on the agenda sheet. But such progress as was possible was made, and the remorseless bell sounded with impartiality when a speaker's limit of five minutes had been reached. In this way a good many expressions of opinion from many different points of view were compressed into the afternoon, and few could have gone away without any new ideas suggested by the Conference. That is, if they had previously taken the trouble to acquaint themselves with the provisions of the Act, for no time was wasted in the room in explaining its general scope, though literature in abundance on the subject could be had from the bookstall at the door.

The subjects discussed were: the relation of the Act to elementary schools; the mode of its adoption and the preliminary proceedings connected therewith; the mode in which, and the conditions under which, grants may best be made by local authorities to institutions giving technical instruction, and the principle on which such grants should be apportioned among institutions of different grades; and the mode of re-organization by which the Science and Art Department may meet the new duties imposed upon it by the Act. The four speakers who introduced these subjects happily represented the four chief "interests" involved—education, politics, manufactures, and science.

Without following in detail the order of the discussion, we may briefly sum up the impression which it left.

The chief interest centred in the question of the relation of the Act to public elementary schools. It is no secret that a certain amount of misunderstanding and difficulty has arisen over the interpretation of the sections of the Act which bear on this knotty point. The Act forbids the application of rates raised under it to the instruction of scholars working in the "obligatory or standard subjects" of the Code. The meaning so far is clear. No scholar of an elementary school at the time working in any of the standards can take advantage of the Act. But how about ex-seventh standard scholars, or indeed of any children in elementary schools, above the exemption standard, to whom the managers may wish to give technical instruction? It is well known that, in many Board and some voluntary schools, a large number of children are retained who have passed all the standards, but are receiving science and art instruction, and earning grants from South Kensington. What are the powers of Boards and managers with respect to these children? One thing is certain—whatever Boards could do before the Act, that at least they can do still. There is no restrictive clause in the Act, which purposely enacts that "nothing in this Act shall be so construed as to interfere with any existing powers of School Boards with respect to the provision of technical and manual instruction." But there has always been some little doubt as to the exact status of School Boards with respect to higher elementary schools, and this the Act does nothing to remove. Sir Henry Roscoe's Bill, if carried, would have placed the whole position of higher elementary instruction on a sound and satisfactory basis. It is a great flaw in the present Act that it leaves matters where they were. It is, however, an ill wind that blows nobody any good, and it may be that certain advantages will, after all, result from this anomalous state of things. Opinions of experts not being unanimous about the meaning of the Act, it is clearly a time for experiments to be made. Liverpool is already moving in the matter, after obtaining Sir Horace Davey's opinion that it is within the power of the School Board to provide technical and manual instruction out of the rates under their general powers, and other School Boards need have little fear in taking a comprehensive view of the Act and applying to the City Councils for their share of the proceeds of the special rate.

The Conference also discussed the question whether a local authority is bound to distribute any grant which it may make among the different qualified schools which apply for aid, or whether it may take the initiative and adopt the course (in many cases the wisest) of concentrating its efforts on making one central school efficient. This question, on which some doubt was previously felt owing to the obscurity of the wording of the Act, was satisfactorily cleared up at Manchester. The town clerk of Blackburn threw down the challenge, by declaring that he intended to advise his Council that they had the power to build a technical school and give it all, or the greater part, of the proceeds of the rate. To this General Donnelly replied that there was nothing in this to which he could take exception, so that local authorities have—so far as the Science and Art Department is concerned—greater liberty of action than some had supposed; and who can object except the Science and Art Department?

But, perhaps, a question of more real importance even than this, is the nature of the qualification entitling a technical school to rate-aid. Here, again, the wording of the Act is not very clear, and it must be confessed that the discussion at the Conference still left it in doubt. In Section I., Sub-section (*a*), we read: "A Local Authority may, on the request of a School Board for its district or any part of its district, or of any other managers of a school or institution within its district *for the time being in receipt of aid from the Department of Science and Art*," make provision for technical education in its district. The narrowest interpretation of this clause would confine the whole benefit of the Act to schools already receiving grants from South Kensington, and this view was understood by some members of the Conference—we hope wrongly—to be endorsed by General Donnelly.

We need hardly point out that such an interpretation would seriously restrict and cripple the operation of the Act. If there is one conclusion clearer than another from the Manchester Conference, it is that there is a general wish to use the rate for what we may venture to term its legitimate purpose—the assistance of those technical subjects which are not at present included in the Science and Art Directory. The worst thing that could be done would be to fritter it away in the form of doles to existing science and art classes; and yet, if only grant-earning schools can profit by the Act, this is what will inevitably tend to take place. Such an institution as the Leicester Technical School, which has classes in bootmaking, lace-making, &c., but no science and art classes, could get no help. The same would be true of such a school as the Finsbury Technical College.

We are glad to believe that so narrowing a meaning cannot fairly be given to the wording of the section. It is true that the words we have italicised make it necessary that the first institution to make a request to the local authority to put the Act in force must be already in connection with South Kensington, if it is not a School Board. But this condition only applies to the initial proceedings. When the request is made and granted, the local authority may make, "to such an extent as may be reasonably sufficient having regard to the requirements of the district, but subject to the conditions and restrictions contained in this section, provision in aid of the technical and manual instruction for the time being supplied" (not only in the school which makes the request, but) "*in schools or institutions within its district*."

That is, it may aid all higher schools already giving instruction which falls within the four corners of the Act, and this instruction includes very much more than the list of subjects on which grants can at present be earned.

And this leads us to the further question, What is meant by technical instruction in the Act? Some people, even at the Conference, understood it to mean merely the subjects in the Science and Art Directory, and any others which may be sanctioned by the Department on the representation of a local authority. This interpretation, again, would severely cripple the usefulness of the Act. At a time when the public is beginning to realize the mechanical nature of much of the teaching subsidized by South Kensington, and the want of elasticity and local adaptability which inevitably results from over-centralization, it would be nothing less than a disaster to tie down all science and art, and perhaps even technological teaching, to the rigid syllabus of a Government Department. Chemistry *quâ* chemistry would not be a "technical" subject, unless, forsooth, it were taught according to a certain syllabus, and followed by a certain examination. No really "technical" subject (except the four or five which are included in the Directory) would be "technical" under the Act until the local authorities in each district (not, be it noted, the managers of schools) had made a representation on the subject to the Science and Art Department, and a minute had been laid before Parliament.

But here, again, we are strongly of opinion that no such meaning can fairly be attached to the definition. "Technical instruction," so runs Clause 8, "shall mean instruction in *the principles of science and art applicable to industries, and in the application of special branches of science and art to specific industries and employments. It shall not include teaching the practice of any trade or industry or employment*." There is the definition. What follows is not a restriction, but an amplification, intended to provide a mode of clearing up doubtful cases. Some one might hereafter declare that some subject, as, for example, mathematics or landscape-painting, though included in the Directory, was not contemplated by the Act, as not being "instruction in the principles of science and art applicable to industries." The section therefore expressly declares that the definition *shall* include all such subjects; and if there be any other subject outside the Directory about which doubt is entertained, that doubt may be set at rest by a representation from a local authority. The Science and Art Department is umpire in doubtful cases, but no appeal to the Department is necessary with reference to subjects—say the principles of weaving, dyeing, plumbing, &c.,—which fall unmistakably within the definition. That, at least, is our view, and we believe the only rational one. It seems to us as clearly the meaning of the letter of the Act, as it was certainly the intention of its promoters.

The Science and Art Department, however, will have the power to define the mode of teaching of technical subjects for the purpose of earning Imperial, though not local, grants. The Department might, as was suggested at Manchester by Principal Garnett, take over the whole system of grants and examinations now controlled by the City and Guilds Institute. But we venture to hope—and Principal Garnett himself would, we believe, agree in this—that the authorities at South Kensington will think very carefully before embarking on a new system of payments on results, in the case of subjects which admit far less of such a test than most of those included in the Science and Art Directory.

They would do well to rely far more on efficient inspection than on individual examinations, and if the inspection were made a reality, instead of being, as now, too often a farce, they might, perhaps, ultimately base their grants for technical instruction on the amount of local contributions, in some such way as that provided for in the Welsh Intermediate Education Act. The Manchester Conference was strongly opposed to any increase of centralization, and the greatest possible freedom ought to be allowed to localities from the outset to develop their own system to suit their own needs.

If the Conference was decided on this point, it was, we think, equally decided that, under a broad interpretation of the Act, the powers conferred on local authorities are really very extensive. It is little short of a scandal that an Act for the improvement of English industry should itself offer such an exhibition of bad workmanship. But it is clear that the right way to solve the problem is for local authorities and School Boards to push ahead, as we believe they can do without fear. The list read by Sir Henry Roscoe at the opening of the proceedings shows what progress in this direction has already been made towards adopting the Act, and the Conference can hardly fail to result in a still more vigorous attempt to make a wise and extensive use of its provisions.

AMERICAN ETHNOLOGICAL REPORTS.

Sixth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1884–85. By J. W. Powell, Director. (Washington: Government Printing Office, 1888.)

FROM the introductory remarks of the Director of the Bureau, we learn that the results of the research prosecuted among the North American Indians, as directed by Act of Congress, were of special interest during the continuance of the work in the fiscal year 1884–85.

As in former years, the labourers in the mound explorations were remarkably successful, more especially in the territories east of the Rocky Mountains, where Prof. Cyrus Thomas, in 1885, and his coadjutors, Messrs. Middleton and Thing, subsequently, made important finds in Indian pottery, which were unique of their kind. Even more valuable are the results of the explorations carried on in New Mexico by Mr. and Mrs. Stevenson, the latter of whom succeeded in obtaining the largest and most important collection extant of objects relating to the sociology of the Zuni tribes. This rare treasury of Indian relics includes specimens of woven fabrics, pottery, stone implements, both ancient and modern, pictured urns, shrines, altars, sacred masks, fetishes, plume sticks, and other objects connected with the ancient mythology and religious practices of these people. Owing to the great variety of the objects, their true character cannot be determined without prolonged investigation, and in the meanwhile they have been deposited in the U.S. Museum, where they await their final classification. According, however, to Mr. Curtis, these, as well as the still more numerous collections of pottery, stone implements, and other objects, amounting to 4000 specimens, which have been obtained in New Mexico, all belong to the indigenous arts and industries of the ancient tribes who occupied the almost unknown tracts of Central America in which the Pueblo Indians are now located.

In the department of linguistic research, prosecuted by the various *employés* of the Bureau, none have perhaps been more successful than Mrs. Ermine Smith, who was fortunate enough to discover two Onondaga MSS., and one MS. in the Mohawk dialect, all of which she has annotated and translated with the assistance of a half-caste of Tuscaroran descent. The origin and history of these MSS. are not distinctly known, but it is conjectured that they are copies of originals which have been lost or destroyed. In their present form, they are, however, alike interesting from a sociological and a linguistic point of view, for while the Mohawk MS. gives an account of the religious rites and chants of the Iroquoian League which represented the elder members of the entire nation, one of the Onondaga MSS. records the ritual in use among the younger members of the same council, and the other the form of address used by the chief Shaman on the initiation of a newly elected chief.

These curious records have been turned to good account by Mrs. Smith in the completion of her Tuscarora dictionary, and in filling up her vocabulary for the "Introduction to the Study of the Indian Languages" now preparing for publication.

In the Far West, and especially in California, the results of linguistic field-work are not equally satisfactory; and in the latter province, it would appear from the report of Mr. Henshaw, who was charged with the inquiry, that a number of the native dialects are extinct. Only a month before his arrival, an old woman had died who was the last person to speak the language of the Indians of Santa Cruz. The search for still surviving members of the several families of Indian languages current on the arrival of the Spaniards has not, therefore, begun too soon. The general results of these linguistic researches are embodied in a work entitled "Proof-Sheets of a Bibliography of the Languages of the North American Indians." This volume, a quarto of more than 1100 pages, was compiled by Mr. Pilling, and issued in 1884 by the Institute, which, with its usual liberality, has distributed the hundred copies printed to other public institutions, and to the various collaborators in the work.

In turning from the highly interesting explanatory remarks of the Director to the various monographs contained in the volume before us (a folio of more than 800 pages), we have first to notice the comprehensive and profusely illustrated treatise of Mr. Holmes, "On the Ancient Art of Chiriqui on the Isthmus of Panama."

Here the author supplies the technologist with an exhaustive history of the rise and development of plastic and textile art in this part of the continent, while he also treats fully of the literature and geography of this hitherto little-known province, whose position between North and South America imparted to the people some of the characteristics of the civilization of both sections of the western hemisphere.

Almost the whole of the enormous mass of clay and metal objects found in Chiriqui was extracted from tombs in the various *huancals*, or cemeteries, which are scattered over the Pacific slope of the province. These were first made known to science by Mr. Merritt, the director of a gold mine in Veragua, who, on hearing of the accidental discovery of a gold figure in Chiriqui, visited the district, and published a report of his explorations in 1859. From him we learn that in 1858, after it became known that a golden image had been discovered at Bugava, more than 1000 persons flocked to the spot, who it was estimated had in that year collected 50,000 dollars' worth of gold from one cemetery alone, which had an area of only 12 acres. A curious fact connected with the plastic decorations of the Chiriqui vases and other objects is that no vegetable forms have served the artificers as models, animals alone having been used for the purpose, as crocodiles, armadillos, monkeys, lizards, alligators, owing probably to their zoo-mythic conceptions of their divinities. Among the various groups of vases, the one comprising the so-called "alligator ware" is the most interest-